Amendments to the Specification

Please replace the paragraph at page 1, lines 4-10 with the following amended paragraph:

The present application ~~is a continuation-in-part of U.S. Patent Application Serial No. 09/235,245 filed January 22, 1999, which claims benefit of U.S. Provisional Patent Application Serial No. 60/093,727 filed July 22, 1998, and U.S. Provisional Patent Application Serial No. 60/074,522 filed January 22, 1998, all of which are hereby incorporated by reference. The present application also~~ claims benefit of U.S. Provisional Patent Application Serial No. 60/146,178 filed July 29, 1999, which is hereby incorporated by reference.

Please replace the paragraph at page 19, line 25 to page 20, line 3 with the following amended paragraph:

Figures ~~2A-C~~ 2A-D describe the expression and purification of *S. aureus* Pol III-L (alpha-large). Figure 2A compares *E. coli* cells that contain the pET11PolC expression vector that are either induced or uninduced for protein expression. The gel is stained with Coomassie Blue. The induced band corresponds to the expected molecular weight of the *S. aureus* Pol III-L, and is indicated to the right of the gel. ~~Figure 2B shows~~ Figures 2B-C show the results of the MonoQ chromatography of a lysate of *E. coli* (pET11PolC-L) induced for Pol III-L. The fractions were analyzed in a Coomassie Blue stained gel (~~top~~ Figure 2B) and for DNA synthesis (~~bottom~~ Figure 2C). Fractions containing Pol III-L are indicated. In ~~Figure 2C~~ Figure 2D, fractions containing Pol III-L from the MonoQ column were pooled and chromatographed on a phosphocellulose column. This shows an analysis of the column fractions from the phosphocellulose column in a Coomassie Blue stained polyacrylamide gel. The position of Pol III-L is indicated to the right.

Please replace the paragraph at page 90, line 18 to page 91, line 7 with the following amended paragraph:

Cells were collected by centrifugation at 5°C. Cells (12 g wet weight) were stored at -70°C. The following steps were performed at 4°C. Cells were thawed and lysed in

cell lysis buffer as described (final volume = 50 ml) and were passed through a French Press (Amico) at a minimum of 20,000 psi. PMSF (2 mM) was added to the lysate as the lysate was collected from the French Press. DNA was removed and the lysate was clarified by centrifugation. The supernatent was dialyzed for 1 h against Buffer A containing 50 mM NaCl. The final conductivity was equivalent to 190 mM NaCl. Supernatent (24 ml, 208 mg) was diluted to 50 ml using Buffer A to bring the conductivity to 96 mM $MgCl_2$, and then was loaded onto an 8 ml MonoQ column equilibrated in Buffer A containing 50 mM NaCl. The column was eluted with a 160 ml linear gradient of Buffer A from 50 mM NaCl to 500 mM NaCl. Seventy five fractions (1.3 ml each) were collected (~~Figure 2B~~ Figures 2B-C). Aliquots were analyzed for their ability to synthesize DNA, and 20 µl of each fraction was analyzed by Coomassie staining of an SDS polyacrylamide gel. Based on the DNA synthetic capability, and the correct size band in the gel, fractions 56-65 containing Pol III-L polymerase were pooled (22 ml, 31 mg). The pooled fractions were dialyzed overnight at 4°C against 50 mM phosphate (pH 7.6), 5 mM DTT, 0.1 mM EDTA, 2 mM PMSF, and 20 % glycerol (P-cell buffer). The dialyzed pool was loaded onto a 4.5 ml phosphocellulose column equilibrated in P-cell buffer, and then eluted with a 25 ml linear gradient of P-cell buffer from 0 M NaCl to 0.5 M NaCl. Fractions of 1 ml were collected and analyzed in a SDS polyacrylamide gel stained with Coomassie Blue (~~Figure 2C~~ Figure 2D). Fractions 20-36 contained the majority of the Pol III-large at a purity of greater than 90 % (5 mg).